

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (currently amended): Method to provide an authentication for a user (U2) in a telecommunication network during session establishment according to a protocol between a user equipment (EQUIP) and an authentication device (AUTH), ~~characterized by~~ said method comprising:

- generating by said user equipment (EQUIP) a credential (C(P-U2; XID21)) based upon a user password (P-U2) being associated to said user (U2) and a session parameter (XID21) being determined by said user equipment (EQUIP) for said session which is ~~actual~~ being established; and

- comprising in a session message (~~DISCOVER(USER2; XID21; C(P-U2; XID21)))~~) of said protocol (~~DHCP~~) a user identification (USER2) that uniquely identifies said user (U2), said session parameter (XID21) and said generated credential (~~C(P-U2; XID21)~~); and

- forwarding said session message (~~DISCOVER(USER2; XID21; C(P-U2; XID21)))~~) by said user equipment (EQUIP) to said authentication device (AUTH); and

- upon reception by said authentication device (AUTH) of said session message (~~DISCOVER(USER2; XID21; C(P-U2; XID21)))~~) verifying said received credential (~~C(P-U2; XID21)~~) with a generated verification credential (~~VC(P-U2; XID21)~~) based upon said received session parameter (XID21) and said user password (P-U2) being associated to said received user identification (USER2) and thereby providing said authentication for said user (U2).

2. (currently amended): The method to provide an authentication for a user ~~(U2)~~ according to claim 1, characterized in that said method further comprises also determining according to predefined rules and conditions an acceptance of said received session parameter ~~(XID21)~~.

3. (currently amended): The method to provide an authentication for a user ~~(U2)~~ according to claim 1, characterized in that said protocol ~~(DHCP)~~ is a Dynamic Host Configuration Protocol.

4. (currently amended): The method to provide an authentication for a user ~~(U2)~~ according to claim 1, characterized in that said session message ~~(DISCOVER(USER2; XID21; C(P-U2; XID21)))~~ is a Discover message of a Dynamic Host Configuration Protocol.

5. (currently amended): The method to provide an authentication for a user ~~(U2)~~ according to claim 4, characterized in that said user identification ~~(USER2)~~, said session parameter ~~(XID21)~~ and said generated credential ~~(C(P-U2; XID21))~~ being included as a predefined Option in an Option field of said Discover message.

6. (currently amended): The method to provide an authentication for a user ~~(U2)~~ according to claim 1 characterized in that said session parameter ~~(XID21)~~ is a session identifier that uniquely identifies said session that is ~~actual~~ being established.

7. (currently amended): A user equipment in a telecommunication network to enable an authentication for a user ~~(U2)~~ during session establishment according to a protocol ~~(DHCP)~~ between said user equipment (EQUIP) and an authentication device ~~(AUTH)~~, characterized by that said user equipment ~~(EQUIP)~~ comprises

- a first generator ~~(GEN1)~~ to generate a credential ~~(C(P-U2; XID21))~~ based upon a user password ~~(P-U2)~~ being associated to said user ~~(U2)~~ and a session parameter ~~(XID21)~~ being

determined by said user equipment (~~EQUIP~~) for said session which is ~~actual~~ being established;  
and

- a second generator (~~GEN2~~) to comprise in a session message (~~DISCOVER~~(~~USER2~~;  
~~XID21~~; ~~C(P-U2; XID21))~~) of said protocol (~~DHCP~~) a user identification (~~USER2~~) uniquely  
identifying said user (~~U2~~), said session parameter (~~XID21~~) and said generated credential (~~C(P-~~  
~~U2; XID21)~~) and to forward said session message (~~DISCOVER~~(~~USER2~~; ~~XID21~~; ~~C(P-U2;~~  
~~XID21)~~)) to said authentication device (~~AUTH~~) in order to enable thereby said authentication  
device (~~AUTH~~), upon reception of said session message (~~DISCOVER~~(~~USER2~~; ~~XID21~~; ~~C(P-U2;~~  
~~XID21)~~)) to verify said received credential (~~C(P-U2; XID21)~~) with a generated verification  
credential (~~VC(P-U2; XID21)~~) based upon said received session parameter (~~XID21~~) and said  
user password (~~P-U2~~) that is associated to said received user identification (~~USER2~~) and to  
provide thereby said authentication for said user (~~U2~~).

8. (currently amended): An authentication device (~~AUTH~~) to provide an  
authentication for a user (~~U2~~) in a telecommunication network during session establishment  
according to a protocol (~~DHCP~~) between a user equipment (~~EQUIP~~) and said authentication  
device (~~AUTH~~), characterized by that said authentication device (~~AUTH~~) comprises

a third generator (~~GEN3~~) to generate a verification credential (~~VC(P-U2; XID21)~~) based  
upon a received session parameter (~~XID21~~) and based upon a user password (~~P-U2~~) that is  
associated to a received user identification (~~USER2~~), and to provide said verification credential  
(~~VC(P-U2; XID21)~~) to a verifier (~~VER~~); and

said verifier (~~VER~~) coupled to said third generator (~~GEN3~~) to verify said verification  
credential (~~VC(P-U2; XID21)~~) against a received credential (~~C(P-U2; XID21)~~) and to provide  
thereby said authentication for said user (~~U2~~);

said received user identification (~~USER2~~), said received session parameter (~~XID21~~) and said received credential (~~C(P-U2; XID21)~~) being comprised by said user equipment (~~EQUIP~~) in a session message (~~DISCOVER(USER2; XID21; C(P-U2; XID21))~~) of said protocol (~~DHCP~~),

said credential (~~C(P-U2; XID21)~~) being generated by said user equipment (~~EQUIP~~) based upon said user password (~~P-U2~~) that is uniquely associated to said user (~~U2~~) and said session parameter (~~XID21~~) that is determined by said user equipment (~~EQUIP~~) for said session which is ~~actual~~ being established;

said session message (~~DISCOVER(USER2; XID21; C(P-U2; XID21))~~) being forwarded by said user equipment (~~EQUIP~~) to said authentication device (~~AUTH~~).

9. (currently amended): The authentication device (~~AUTH~~) according to claim 8, characterized in that said authentication device is at least partly included in a network access provider (~~NAP~~).

10. (currently amended): Telecommunication network to provide an authentication for a user (~~U2~~), characterized in that said telecommunication network comprises a user equipment (~~EQUIP~~) according to claim 6.

11. (previously presented): An authentication device (~~AUTH~~) according to claim 7.

12. (canceled).